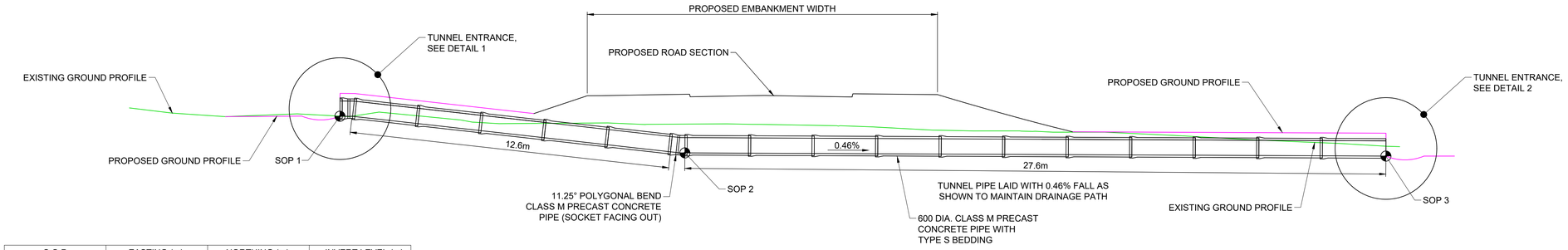
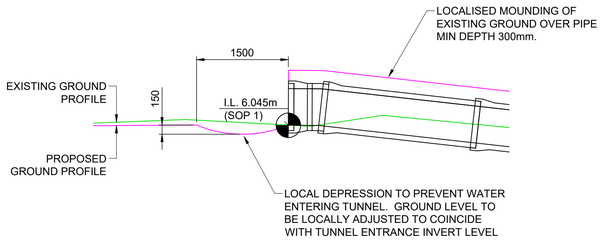

PROPOSED EMBANKMENT WIDTH
TUNNEL ENTRANCE, SEE DETAIL 1
PROPOSED ROAD SECTION
EXISTING GROUND PROFILE
PROPOSED GROUND PROFILE
SOP 1
12.6m
0.46%
27.6m
SOP 2
11.25° POLYGONAL BEND CLASS M PRECAST CONCRETE PIPE (SOCKET FACING OUT)
TUNNEL PIPE LAID WITH 0.46% FALL AS SHOWN TO MAINTAIN DRAINAGE PATH
600 DIA. CLASS M PRECAST CONCRETE PIPE WITH TYPE S BEDDING
PROPOSED GROUND PROFILE
TUNNEL ENTRANCE, SEE DETAIL 2
EXISTING GROUND PROFILE
SOP 3

S.O.P	EASTING (m)	NORTHING (m)	INVERT LEVEL (m)
1	558428.985	173520.335	6.045
2	558429.553	173507.039	4.604
3	558430.747	173479.113	4.480

WILDLIFE TUNNEL SETTING OUT

WILDLIFE TUNNEL PROFILE

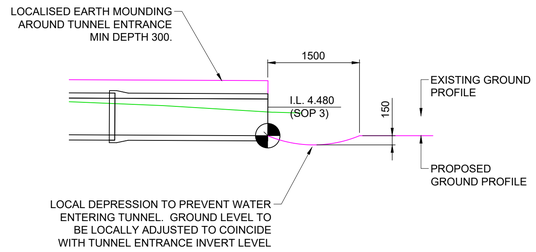
SCALE 1:100


LOCALISED MOUNDING OF EXISTING GROUND OVER PIPE MIN DEPTH 300mm.
1500
EXISTING GROUND PROFILE
150
I.L. 6.045m (SOP 1)
PROPOSED GROUND PROFILE
LOCAL DEPRESSION TO PREVENT WATER ENTERING TUNNEL. GROUND LEVEL TO BE LOCALLY ADJUSTED TO COINCIDE WITH TUNNEL ENTRANCE INVERT LEVEL

DETAIL 1

TUNNEL ENTRANCE (EAST SIDE)

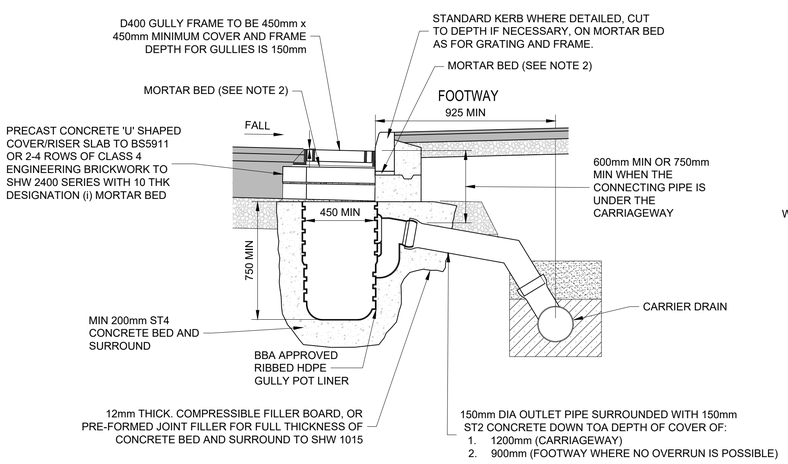
SCALE 1:50


LOCALISED EARTH MOUNDING AROUND TUNNEL ENTRANCE MIN DEPTH 300.
1500
I.L. 4.480 (SOP 3)
150
EXISTING GROUND PROFILE
PROPOSED GROUND PROFILE
LOCAL DEPRESSION TO PREVENT WATER ENTERING TUNNEL. GROUND LEVEL TO BE LOCALLY ADJUSTED TO COINCIDE WITH TUNNEL ENTRANCE INVERT LEVEL

DETAIL 2

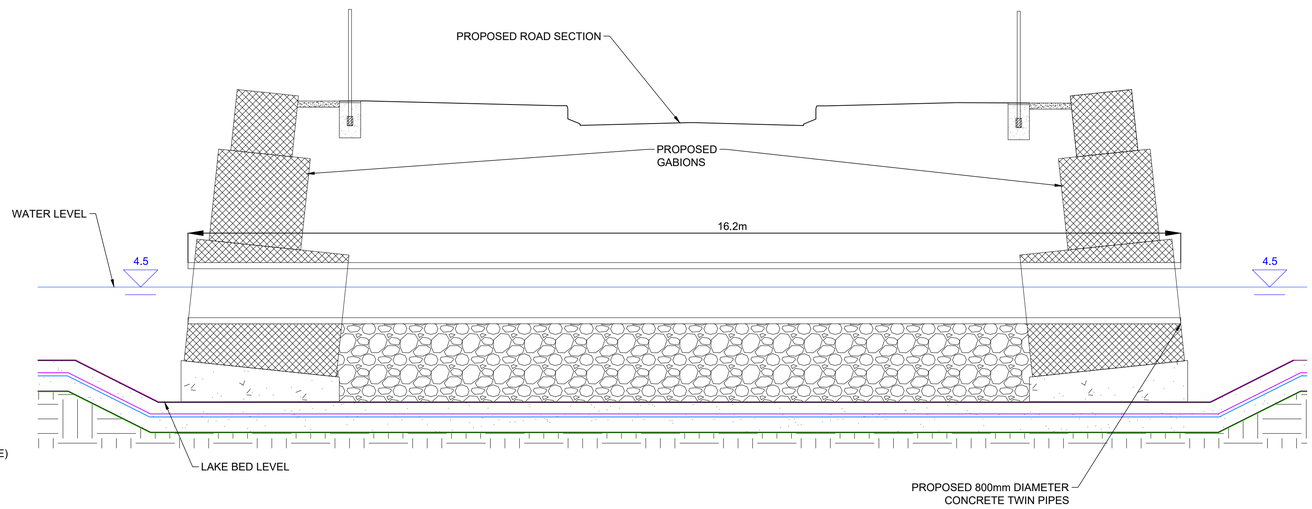
TUNNEL ENTRANCE (WEST SIDE)

SCALE 1:50


D400 GULLY FRAME TO BE 450mm x 450mm MINIMUM COVER AND FRAME DEPTH FOR GULLIES IS 150mm
STANDARD KERB WHERE DETAILED, CUT TO DEPTH IF NECESSARY, ON MORTAR BED AS FOR GRATING AND FRAME.
MORTAR BED (SEE NOTE 2)
MORTAR BED (SEE NOTE 2)
FOOTWAY
925 MIN
FALL
PRECAST CONCRETE 'U' SHAPED COVER/RISER SLAB TO BS5911 OR 2-4 ROWS OF CLASS 4 ENGINEERING BRICKWORK TO SHW 2400 SERIES WITH 10 THK DESIGNATION (i) MORTAR BED
600mm MIN OR 750mm MIN WHEN THE CONNECTING PIPE IS UNDER THE CARRIAGEWAY
450 MIN
750 MIN
CARRIER DRAIN
MIN 200mm ST4 CONCRETE BED AND SURROUND
BBA APPROVED RIBBED HDPE GULLY POT LINER
12mm THICK. COMPRESSIBLE FILLER BOARD, OR PRE-FORMED JOINT FILLER FOR FULL THICKNESS OF CONCRETE BED AND SURROUND TO SHW 1015
150mm DIA OUTLET PIPE SURROUNDED WITH 150mm ST2 CONCRETE DOWN TOA DEPTH OF COVER OF:
1. 1200mm (CARRIAGEWAY)
2. 900mm (FOOTWAY WHERE NO OVERRUN IS POSSIBLE)

TYPICAL GULLEY WITH CARRIER DRAIN

SCALE 1:20



800mm TWIN PIPES PROFILE

SCALE 1:50

2m 0 2m 4m 6m 8m 10m
SCALE 1:100

1m 0 1m 2m 3m 4m 5m
SCALE 1:50

400mm 0 400mm 800mm 1200mm 1600mm 2000mm
SCALE 1:20

DO NOT SCALE FROM THIS DRAWING

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
2. FRAMES SHALL BE BEDDED ON A GAUGED CLASS 1 (3:1) SAND/CEMENT MORTAR TO CL.2402 OF SHW MORTAR DESIGNATION (i), AND EITHER 2 OR 4 COURSES OF ENGINEERING BRICKWORK CLASS 'B' TO BS EN 771-1:2011.
3. DIRECTION OF OUTFALL OF GULLY IS AS SHOWN ON LAYOUT DRAWINGS.
4. GULLY FRAME TO BE SET 0 TO 6mm LOWER AND IN THE SAME PLANE AS ADJACENT SURFACES.
5. MINIMUM DEPTH FROM TOP OF GULLY TOP TO TOP OF OUTLET SHALL BE:-
   750mm UNDER CARRIAGEWAY
   600mm ELSEWHERE
6. ALL IRONWORK SHALL CARRY A BSI KITE MARK.
7. ALL GULLY GRATING AND FRAMES TO BE 'HINGED' HEAVY DUTY DUCTILE IRON, MINIMUM GRADE D400 IN ACCORDANCE WITH BS EN 124:1994 AND SECTION 508 OF THE SHW.
8. ALL DRAINAGE WORKS TO BE IN ACCORDANCE WITH SERIES 500 OF THE SPECIFICATION FOR HIGHWAY WORKS AND SPECIFICATION REFERENCE BRT-TG-XX-ZZ-SP-DD-0500
9. REFER TO DRAWING NO. BRT-TG-XX-ZZ-DR-HI-0711 FOR PAVEMENT CONSTRUCTION THICKNESS
10. REFER TO DRAWING NO. BRT-TG-XX-ZZ-DR-HI-0501 FOR THE DRAINAGE PLAN LAYOUT

REV.	BY	CHK'D	APP'D	DATE	DESCRIPTION
P02	MS	LD	MJH	24/02/21	DETAILS OF WILDLIFE TUNNEL ADDED
P01	BPH	LD	MJH	14/12/20	FIRST ISSUE

CODE	DRAWING STATUS
S3	FOR REVIEW/COMMENT

Tony Gee and Partners LLP
8th Floor, International House
Dover Place,
Ashford, Kent.
TN23 1HU
Tel: 01233 639787

www.tonygee.com
Consulting Engineers

Kent County Council kent.gov.uk

Balfour Beatty

BEAN TUNNEL
TUNNEL AND HIGHWAY DETAILED DESIGN

HIGHWAYS DRAINAGE DETAILS

SHEET 1 OF 1

DRAWING. No.
BRT-TG-XX-ZZ-DR-HI-0511

DRAWN : BPH	DESIGNED :	REVISION
SCALE :	ORIGINAL SIZE : A1	P02